

## **Get Me Out of This Classroom!**

### **Barriers to Outdoor Learning**

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#### **Introduction**

My name is Laura Bohn, and I teach fifth grade at Bayfield School in Bayfield, WI. I participated in the Earth Partnership for schools class hosted by the UW Madison Arboretum in the summer of 2008. I was really re-inspired by my whole experience in Madison and could not wait to get back to school and do all the cool outdoor activities that I learned.

I say re-inspired because I attended and graduated from Northland College several years ago, and since then I feel that I have lost touch with my environmental roots. I remember reading A Sand County Almanac, by Aldo Leopold, in one of my freshman English classes and really getting in to nature and phenology. I took some awesome environmental education classes at Northland, including, Art in Nature, to Environmental Education Curriculums Review, to a class called Spring Transition, which was a month long class at an Audubon Center. I graduated from Northland with an education degree and an environmental education degree. I had been teaching many different things from the time I graduated college to this past year when I finally got my own classroom, and I feel that I lost that environmental education spark that I once had. By taking the Earth Partnership for schools class this summer, I got it back.

I can tell you the exact moment that rekindled my spark. I was sitting next to Nina Leopold Bradley, Aldo Leopold's 90-year-old daughter. We were sitting under an Oak tree her father had planted, and she was talking to my Earth Partnership class in front of the legendary Leopold Shack. I will never forget sitting next to Nina and listening to the stories, she told about

her father and the phenology he collected in the area, an area that inspired the book, A Sand County Almanac, and an area that re-inspired me

I have been reading Leopold's, A Sand County Almanac to my students all year long. Every month we read that month's entry, and then we go out to our same spot observation area. However, all year I felt that I could be doing more as far as incorporating more of the outdoors into my science lessons.

### **Background**

The Bayfield School District is made up of two buildings, a larger K-12 building in Bayfield and a smaller two-room elementary school on Madeline Island. Our total enrollment for the 2008-2009 school year was 457. The school in Bayfield is located on top of a hill overlooking Lake Superior and the Apostle Islands. Bayfield is known as the gateway to the Apostle Islands National Lakeshore, and a National Park Service headquarters building is only a block away from Bayfield School. With the Chequamegon National Forest covering much of the county, the National Forest Service also has a strong presence in the area.

The Bayfield area is filled with natural beauty, and the district properties and adjacent lands are no exception. A large wooded ravine with a small creek surrounds the school on two sides. Another side is a semi-wooded hill with apple trees and gardens leading up to a baseball field surrounded by forested public land. There is also a school forest about four miles from the school. Around 75-80% of the students are Ojibwa Indians from the Red Cliff Band of Lake Superior Chippewa. A similar percentage of students are eligible to receive free or reduced lunch.

## **Problem Statement**

What would increase the number of outdoor science lessons in my fifth grade classroom at Bayfield Elementary? What barriers have other teachers run into, and what strategies have they used to increase the number of outdoor science lessons or activities in their classroom? Would these strategies work with my classroom, why or why not?

I have been taking my students outside for some science lessons but I feel like I could be doing more. This problem statement is one that I have been thinking about since this action research class started in January, and in a way, I think it has made me take my students outside more because this question was in the forefront of my mind.

## **Description of the Research Process**

I started trying to answer my question by looking at the 5<sup>th</sup> grade science curriculum to see where I could fit going outdoors with my students into the most logical places and then expand on that and see how I can put it in other places. I put little sticky notes by the lessons that could be made into an outdoor lessons and I put on the note what I would do. After I was done, I had many notes, and I was feeling better about the lesson I was to teach the rest of the year. Now the problem was going to be how to implement the actual going outside part. I had come across my first and biggest barrier to outdoor learning, TIME.

I had many other barriers to deal with; student allergies, student behavior, student medical needs, problems with materials, and weather, to name a few. I felt like I needed to talk to someone who had been doing this longer than I had so I could get some reassurance.

## **Outdoor Learning: Barriers and solutions:**

I talked with Julie Fitzpatrick, a teacher at Frank Allis Elementary School in Madison and a former Earth Partnership graduate. We discussed barriers that she had faced when taking her students outside for science class, and I asked her how she overcame those barriers.

**Barrier:** I'm not dressed properly and neither are the kids.

**Solution:** Throw out those high heels and start dressing for the weather. Talk to your students about the kinds of activities you would like to start doing with them, and what they will need to be wearing if they want to be able to do those activities. Do not try to spring it on them without warning.

**Barrier:** I am not familiar enough with the grounds to know where to take the kids when we get outside.

**Solution:** Take time to scout out the area. Walk the perimeter of the grounds, talk to any staff that does outdoor learning already. Talk to the custodian about places that might be good.

**Barrier:** The custodian growls when we track in mud.

**Solution:** It is critical to build a good working relationship with the custodial staff. Give them warning before you plan to go out, and tell them what you intend to do. Listen to their concerns and plan to clean up after yourself so that your activities do not impact their workload. Ask them occasionally if you are overlooking anything or if there is some task they could suggest for students.

**Barrier:** The principal thinks outdoor learning is a euphemism for goofing off.

**Solution:** Email your principal a lesson plan complete with student goals before you go out, so that it is clear how the outdoor learning experience will be of value to the students. You probably

won't have to do this every time, as you can document the learning by taking pictures or publishing their written responses, or noting the improvements in their overall behavior.

**Barrier:** There is no money for tools, gravel, soil, gloves, seeds, equipment rental, or anything else.

**Solution:** Write a grant... and another.... and another. Hit up your PTA. Our most recent project was funded with a staff donation matched by a committee of the PTA. Alternatively, plan activities that do not require funds, such as observations from a single spot.

**Barrier:** Our curriculum is so full now; there is no time to squeeze in extras like outdoor learning.

**Solution:** Outdoor learning is not an extra. It is a very good resource for meeting standards that often works better than alternatives. Measurement is a natural in the garden, especially the planning steps. Symmetry, counting plant communities, calculating tree heights, area, circumference of circles...the possibilities are endless, and that is just for math.

**Barrier:** Most of the other staff members are not interested in outdoor learning.

**Solution:** Don't assume this. Talk about all the good things you have read about outdoor learning and how much you would like to pair up with someone who would be willing to try it with you. If you don't get any takers, try it on your own, document with photos, post them online to your staff, and rave about how great it went. Now that the weather is nicer, many teachers would not mind an activity that would get the students (and themselves) outdoors.

**Barrier:** I don't have any resources that tell me how to do outdoor learning.

**Solution:** Look harder. It used to be true that resources for outdoor learning were limited, but no longer. A simple search on Google will get you more than you can use. Try "Junior Master Gardner" Program.

**Barrier:** Our district standards don't mention outdoor learning.

**Solution:** Get on the committee that creates the standards and remedy that situation. There are statewide environmental learning standards for Wisconsin that lend themselves well to outdoor learning.

**Barrier:** I don't know beans about growing things.

**Solution:** You probably know more than you give yourself credit for. Take the county Master Gardener program and get certified. You will learn a lot, and you will gain confidence about what you already know.

Talking with Julie was very helpful and gave me some real insights to overcoming the barriers I was facing. I was reassured when she said, “Outdoor learning is not an extra. It is a very good resource for meeting standards and often works better than alternatives.”

I also wanted to know what the teachers in my school were thinking when it came time for science class and what they felt were the main barriers to outdoor education in their classrooms. Leo Filipczak, a teacher at Bayfield, and I administered a survey to the elementary staff to find out how they were feeling about taking their students outside. This is what we found:

**Least Significant Reported Barriers (Most teachers choosing “Disagree or Strongly Disagree).**

1. The administration does not support outdoor activities.
2. The students are not motivated to participate in outdoor activities.
3. I am not particularly interested in doing more outdoor activities with my students.

4. Outdoor activities are not worthwhile for teaching academics.
5. Students do not learn as much during outdoor activities as they do inside.
6. Our school does not have suitable areas for outdoor education.
7. Only the natural sciences can be easily taught outside.

**Most Significant Reported Barriers (Most teachers choosing “Agree or Strongly Agree).**

1. I would not have adequate support for students with emotional and behavioral disabilities .
2. There is not enough time in the day to fit outdoor activities into the schedule.

**Items least necessary to overcome barriers (Most teachers choosing “disagree or Strongly disagree).**

1. More personal interest in the outdoors.

**Items most likely to help teachers overcome barriers (Most teachers choosing “Agree or Strongly Agree).**

1. An additional special education aide.
2. Fun and exciting activities for students to do outside.
3. Another teacher to watch half the class and only take half the class outside at a time.
4. A quicker and easier way to access natural areas.

It was interesting that the teachers' main concerns were the same as some of my own: not enough time in the day and behavior problems.

### **Action Plan/Overcoming my Barriers**

I like thinking that I took action to overcome the barriers I was having because during the year it felt like I was just plowing through and doing what I could. Reflection is a powerful tool; it helps to see things in a new light. I tried to go outside every week to do single spot observations with my class, and looking back on that now I can see that it was too much and that once or twice a month would have been fine. We did get some great phenological data, and I got some great pictures of some of my students throughout the

seasons:









I had the students journal in their spots every time we went out. Here are some of the observations at the **beginning of the year**. These are actual quotes from students.

Student #1 “I feel the wind. I hear Joe. It is sunny.”

Student #2 “I am in the shade my legs are cold. My tree is small and dumb.”

Student #3 “I see a cloud that looks like a horse.”

Student #4 “It is cold and I want to go in.”

Here are some of the observations at the **end of the year**.

Student #1 “The wind just blew my hair in front of my face. I can see the white caps on the lake, they are big today. I hear a chickadee . The sun is making my back warm even though it’s very windy.”

Student #2 “My tree has gotten bigger. Mrs. Bohn brought a tape measure and it grew 2 inches this spring! It was 16 inches tall and now it’s 18 inches, almost 2 feet. Grow little guy grow!”

Student #3 “I see a Cumulus cloud that looks like a horse. Cirrus clouds are my favorite because they really do look like horse tails.”

Student #4 “It is 60 degrees Fahrenheit and the wind is coming at me from the southeast, it feels warm here in the sun.”

You can see that by the end of the year their journal entries are much more descriptive than at the beginning of the year. I just took part of their journal entries to show the differences. Some of the students would write a page or more in the ten minutes we would do our observations.

When I started talking about barriers I faced when teaching outdoor science lessons I said that time was a big concern. How I managed to overcome that barrier was to take short amounts of time at the end of the day and go outside. The last 30 minutes of a day were perfect. We could take five minutes to get to our spots, then sit, and observe for ten minutes. Then we shared our findings for another ten minutes followed by five minutes to transition back into the classroom for the end of the day duties. It does seem at times that we were always rushing to do things when we were outside. It helped me to have a student be a timekeeper and tell everyone how much time they had left.

Overcoming the problem with materials was easier than I thought. **I** would bring all the materials we needed outside with us. I had a pencil box with sharp pencils in it, so if a pencil would break the student could come to me and get a new one. I would bring the students' science journals or the activity we were doing. This way no one had to remember a pencil and their journal, and when we got to the direction spot, I could tell them what they were going to do that day.

The weather barrier is something that is always a factor when doing outside activities. Predicting the weather is a great lesson in itself, and that is just what we did one day when we were rained on. The students and I came back in and for the next 20 minutes, we talked about high and low pressure systems and how they affect weather. My favorite outdoor teaching moment having to do with weather is when we went outside on the first day of spring to do our same spot observations, and it was snowing.

Overcoming students' medical needs has been a challenge. I have a boy who has type 2 diabetes, and boy who is allergic to bees. When we are outside, they are both always on my mind. I have an outdoor pack I take with us; it has everything from band-aids to glucose tabs to an epee pen to tissues. When teachers leave the building, they are required to take a hand radio with them. I always take one for those just in case times.

Having the hand radio is good in case a behavior issue comes up and someone needs to be sent inside. I can radio ahead to let a teacher or the office know that I am sending in a student that misbehaved. I have only had to do that once. I find that for the most part students really want to be outside learning and I do not have many behavior problems. I think another reason for

my students' good behavior outside is due to the ground rules that I set at the beginning of the year.

### **Putting it all together**

Through my research, it appears that a common barrier to outdoor learning has emerged, which is the time barrier. I thought that would be my biggest constraint, but looking back at the year I can see that I did make time to engage in outdoor learning with my students. I fit it in when I could, and I made it work with the science curriculum.

The teacher that I spoke with from a school in Madison, Julie Fitzpatrick, had a great point when she said, "Outdoor learning is not an extra. It is a very good resource for meeting standards and often works better than alternatives." This is so true. I have found if it involved going outside my students were hooked. I hope that I can help the teachers at my school to see that time is not as big of a barrier as they think.

### **What is next?**

I cannot wait for next year to start. There are many things that I plan to do differently. I have ordered hard cover journals so they will be easier to write on outside. Another change I am going to make is that when the students pick their spots for the same spot observation I will have them spread out more and pick not just a spot but also a tree. This year some students picked trees and some just picked a place near a friend. I think I will also enforce a strict no talking rule so that they can better observe nature without distraction.

Now that my action research is complete on this topic, I am looking forward to sharing it with other teachers. I will do a presentation for the staff at my school, and I will talk to other

schools in the area to see if they are interested in my research. I hope to have some discussions on outdoor science lessons that will help other educators see that it is not that hard to do.

### **Final Reflection:**

“There is a dangerous tendency for laymen to conceive of teaching as a process of indoctrination with pre-determined truth. Only those charged with the discovery of facts through research can appreciate the tentative nature of the conclusions on which many conservation policies are now based.

It follows that in organizing the primary university conservation structure, teaching and researching should never be divorced. Teaching should be entrusted only to productive research workers. University teaching without research soon becomes sterile.”

*The Essential Aldo Leopold Quotations and Commentaries (Meine, 1999, p. 259)*

I like the part of this quote when Leopold says that, “Teaching should be entrusted only to productive research workers.” In order to keep my teaching license in the state of Wisconsin, I need to get six credits every five years and I think I will seek out more research-based classes. I like that I feel a sense of self-discovery about my teaching practices after completing my research. I like that I came up with the question I was to research. I think the whole Action Research process has helped me to better examine my own teaching and reflect on ways to make it better.

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